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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,903	02/01/2005	Stephanie Frahn	264742U/S0X PCT	7011
22850 7590 03/17/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER RONESL VICKERY M				
ART UNIT 1796		PAPER NUMBER		
NOTIFICATION DATE 03/17/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/522,903

**Applicant(s)**

FRAHN ET AL.

**Examiner**

Vickey Ronesi

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-17 is/are pending in the application.
- 4a) Of the above claim(s) 14-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

1. All outstanding objections and rejections are withdrawn in light of applicant's amendment filed on 12/14/2007.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 12/14/2007. In particular, claims 2-17 are new. Thus, the following action is properly made final.

***Election/Restrictions***

4. Newly submitted claims 14-17 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Claims 14-17 and claims 2-13 are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product, and the species are patentably distinct (MPEP § 806.05(j)). In the instant case, the intermediate product is deemed to be useful in a molded thermoplastic article and the inventions are deemed patentably distinct because there is nothing of record to show them to be obvious variants. Note that the composition is transformed due to the presence of crosslinking functional groups.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution

on the merits. Accordingly, claims 14-17 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 112***

5. Claims 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 11-13, the claims appear to improperly recite a Markush group. Consequently, it is impossible to determine which elements of the group are required by the claim2. When materials recited in a claim are so related as to constitute a proper Markush group, they may be recited in the conventional manner, or alternatively. For example, if “wherein R is a material selected from the group consisting of A, B, C and D” is a proper limitation, then “wherein R is A, B, C or D” shall also be considered proper (emphasis added). See MPEP § 2173.05(h).

***Claim Rejections - 35 USC § 102***

6. Claim 2-13 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,020,419 (hereinafter, “Bock”).

Bock discloses a coating composition comprising 0.5-25 wt % based on solids of hydrophobic, pyrogenic silica, a binder such as one of polyurethane, polyisocyanate, polyester, and polyacrylate (col. 4, lines 13-26 and col. 5, lines 1-29), and pyrogenic silica and solvent (col. 6, lines 17-30). The pyrogenic silica is treated with octyltrimethoxysilane or

dimethyldimethoxysilane, which provides for octylsilyl and dimethylsilyl groups on the surface of the pyrogenic silica and hexamethyl-disilazane which provides for hexadecylsilyl and alkyl silyl groups (col. 3, lines 60-67). Additives are also used (col. 6, line 60 to col. 7, line 13). See examples.

In light of the above, it is clear that Bock anticipates the presently cited claims.

### ***Double Patenting***

7. Applicant's statement on page 9 of the amendment filed 12/14/2007 regarding the provisional obviousness-type double patenting rejections is acknowledged. If the following double-patenting rejection is the only rejection remaining in this application and if there is a provisional obviousness-type double patenting rejection in the later-filed copending application, per USPTO practice, the examiner will withdraw the rejection.

#### ***Double Patenting, I***

8. Claims 2, 3, 5, and 10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 15 of copending Application No. 10/524,472 (published as US 2005/0244642). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons given below.

US appl. '472 claims a lacquer comprising a polyurethane binder and a silanised pyrogenic silica. While US appl. '472 does not claim the amounts, it is considered that it would have been obvious to one of ordinary skill in the art to utilize suitable amounts to obtain an

effective lacquer coating. Furthermore, while US appl. '472 does not claim the types of silanised groups, attention is drawn to page 1, lines 17-21 of the specification of US appl. '472 which teaches that the silanised groups include dimethylsilyl and/or monomethylsilyl groups. Case law holds those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. *In re Vogel*, 422 F.2d 438, 164 USPQ 619,622 (CCPA 1970).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 2, 3, 5, and 10 are directed to an invention not patentably distinct from claim 15 of commonly assigned copending Application No. 10/524,472 (published as US 2005/0244642). Specifically, see the discussion in paragraph 8 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned copending Application No. 10/524,472 (published as US 2005/0244642), discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at

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the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

*Note:* A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

*Double Patenting, II*

10. Claim 1, 8, and 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 17 and 18 of copending Application No. 10/524,366 (published as US 2005/0241531). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons given below.

US appl. '366 claims a lacquer comprising a pyrogenic silica having alkylsilyl groups. Given that US appl. '366 claims a lacquer a hydrophically treated, pyrogenic silica, it would have been obvious to one of ordinary skill in the art to prepare a lacquer with a suitable lacquer binder and silica in suitable amounts.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claim 1, 8, and 9 are directed to an invention not patentably distinct from claims 17 and 18 of commonly assigned copending Application No. 10/524,366 (published as US 2005/0241531). Specifically, see the discussion in paragraph 10 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned copending Application No. 10/524,366 (published as US 2005/0241531), discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

*Note:* A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

#### ***Response to Arguments***

12. Applicant's arguments filed 12/14/2007 have been fully considered but they are not persuasive. Specifically, applicant argues (A) that Bock does not disclose "structurally modified" pyrogenic silica; (B) that Bock describes using Aerosil R 972 as the pyrogenic silica which is in applicant's comparative example and therefore cannot disclose the instant invention; and (C) that the instant invention provides for unexpectedly improved scratch resistance.



With respect to argument (A), while the instant claims recite “structurally modified” silica, it is not made clear how “structurally modified” silica is different from the silica taught by Bock or why the pyrogenic silica of Bock is not structurally modified. Bock teaches that the silica is prepared by jet dispersion, and it is the examiner’s position that this process causes the silica to be “structurally modified.” Furthermore, the specification does not elaborate on how the instant silica is “structurally modified.” While applicants have cited other US patent application documents what is meant by “structurally modified,” this is insufficient because these references are not part of the instant disclosure and cannot be incorporated by reference.

With respect to argument (B), while Bock discloses the silica in applicant's comparative example, case law holds “applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others.” *In re Courtright*, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967).3

With respect to argument (C), the data in the specification cannot establish unexpected results for several reasons. First, it has not been established how “structurally modified” silica differentiates itself from the silica of Bock. See discussion above.

Second, evidence of secondary considerations is irrelevant to 35 USC 102 rejections and thus cannot overcome a rejection so based. *In re Wiggins*, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973).

Third, the data is not reasonably commensurate in scope with the scope of the claims. Case law holds that evidence is insufficient to rebut a *prima facie* case if not commensurate in scope with the claimed invention. *In re Grasselli*, 713 F.2d 731, 741, 218 USPQ 769, 777 (Fed. Cir. 1983). Specifically, the type of polymer composition in the lacquer (i.e., acrylic copolymer)

is not commensurate in scope with the scope of the claims. Case law holds that evidence of superior properties in one species insufficient to establish the nonobviousness of a subgenus containing hundreds of compounds. *In re Greenfield*, 571 F.2d 1185, 1189, 197 USPQ 227, 230 (CCPA 1978). Furthermore, the relative amounts binder and silica are not reasonably commensurate in scope. Case law holds that whether the unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, the “objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support.” In other words, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range (i.e., scope). *In re Clemens*, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980), MPEP 716.02(d).

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/4/2008  
Vickey Ronesi

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